

REMARKS

By the present amendment, claim 9 has been amended. Claims 1-8, 10, 15, 16, 17, and 22 were previously canceled. Claims 9, 11-14, 18-21, and 23-30 are currently pending in the application. Reconsideration and allowance of all the claims is respectfully requested in view of the foregoing amendments and the following remarks.

With Regard to the Rejection of Claims 9, 11, 14, 18, 19, 21, 24, 27, and 29 under 35 U.S.C. 102(b)

The Examiner has rejected claims 9, 11, 14, 18, 19, 21, 24, 27, and 29 under 35 U.S.C. 102(b) as being anticipated by Orlov et al. (U.S. Patent 6,382,904) [hereinafter "Orlov"]. The Applicant believes that this rejection has been addressed and overcome by the present amendment.

The Examiner's attention is directed to the following feature of claim 9 as amended:

***a single** annular fluid intake scoop and flow through encasement assembly surrounding the rotor and blade assembly,*

(The part of the limitation in bold, found at least in paragraph 22 and shown in Figs. 1 – 5 of the specification, has been incorporated into independent claim 9 by the present amendment.)

The Applicant submits that at least the above feature of claim 9 as amended is not taught by Orlov.

Referring to Figs. 1 - 7 of Orlov, all of the figures show multiple annular shells, which are referred to in the drawings with the reference numerals 5, 8 and 10. Furthermore, throughout the entire specification of Orlov, a wind turbine having the multiple annular shells 5, 8, and 10 is described. In this respect, reference is made to column 2, lines 21 to 34, of Orlov, wherein it is stated:

In the given invention, the indicated disadvantage is largely eliminated by the wind power-generating unit in the form of a power unit mounted on a support comprising at least one turbine with a nozzle apparatus mechanically connected to one or several generators, a central shell, an annular front shell with at least one input channel of the turbine, and an annular external shell forming a diffuser output channel with the central shell. The power-generating unit is equipped with an additional annular shell forming, with external surface of the front and central shells, a narrowing and expanding first intermediate channel connected in its intermediate part with the output channel of the turbine.

In the above passage it is submitted that Orlov indicates that multiple annular shells are necessary for the wind turbine of Orlov to function, as the presence of multiple annular shells eliminates the disadvantage (discussed in the section “Description of the Related Art” of Orlov, which will not be quoted here due to its length) caused by not having the multiple annular shells.

On the contrary, the Applicant’s claim 9 as amended requires a “**single** annular fluid intake scoop and flow through encasement assembly”, as opposed to multiple annular fluid intake scoop and flow through encasement assemblies. Thus, Orlov teach the opposite of what is now claimed by the Applicant.

Therefore, at least the above features of claim 9 as amended are not taught (nor suggested) by Orlov and the Examiner is requested to withdraw this rejection.

With Regard to the Rejection of Claims 12, 13, 20, and 30 under 35 U.S.C. 103(a)

The Examiner has rejected claims 12, 13, 20, and 30 under 35 U.S.C. 103(a) as being unpatentable over Orlov in view of Karlsson et al. (U.S. Patent 4,320,304) [hereinafter “Karlsson”]. The Applicant believes that this rejection has been addressed and overcome by the present amendment.

In the present amendment, the limitation “**single** annular fluid intake scoop and flow through encasement assembly” was incorporated into claim 9. As is the case in Orlov, Karlsson teaches a wind turbine having multiple annular shells as shown in Figs. 1 – 7.

Referring to column 3, lines 27 to 39, of Karlsson it is stated:

An important embodiment according to the present invention is a combination of an accelerator of the type described above and a diffuser of a modified design.

Now, referring to column 3, lines 49 to 54, of Karlsson it is stated:

The device shown in Fig. 6 consists in principle of an accelerator of the type described above in combination with a modified diffuser. It consists of a series of annular sections 1-4, arranged symmetrically and with increasing diameters and separated from each other by annular slots 13-15.

Thus, neither Orlov nor Karlsson teach a wind turbine having a single annular shell.

Therefore, claims 12, 13, 20 and 30 are believed to be allowable based on their dependency from claim 9, as discussed above with respect to claim 9, as well as for the additional features recited therein. As such, the Examiner is requested to withdraw this rejection.

As an aside, the Applicant notes that the Examiner indicated that Orlov teaches a fluid displacement head arrangement that is, at least in part, spherical. The Applicant disagrees with the Examiner. However, in view of the above arguments, the Applicant does not intend to discuss the correctness thereof at this time, but reserves the right to do so at a later date should the need arise.

Additionally, the Applicant notes that the Examiner indicated that Karlsson teaches a fluid velocity increasing surface being S-shaped (in Figs. 6 and 7 thereof). Again, the Applicant disagrees with the Examiner. However, in view of the above arguments, the Applicant does not intend to discuss the correctness thereof at this time, but reserves the right to do so at a later date should the need arise.

Finally, the Examiner indicated that it is obvious to combine the teachings of Orlov and Karlsson, as they are from the same field of endeavor, being the fluid turbine art. The Applicant

takes no position on this issue at this time in view of the above arguments, and specifically reserves the right to argue against such combination in the future.

With Regard to the Rejection of Claim 23 under 35 U.S.C. 103(a)

The Examiner has rejected claim 23 under 35 U.S.C. 103(a) as being unpatentable over Orlov in view of Rabinow (U.S. Patent 2,973,041). The Applicant believes that this rejection has been addressed and overcome by the present amendment.

In the present amendment, the limitation “**single** annular fluid intake scoop and flow through encasement assembly” was incorporated into claim 9. Rabinow does not teach any annular fluid intake scoop and flow through encasement assemblies surrounding the rotor and blade assembly.

Therefore, claim 23 is believed to be allowable based on its dependency from claim 9, as discussed above with respect to claim 9, as well as for the additional feature recited therein. As such, the Examiner is requested to withdraw this rejection.

Finally, the Examiner indicated that it is obvious to combine the teachings of Orlov and Rabinow, as they are from the same field of endeavor, being the fluid turbine art. The Applicant takes no position on this issue at this time in view of the above arguments, and specifically reserves the right to argue against such combination in the future.

With Regard to the Rejection of Claim 28 under 35 U.S.C. 103(a)

The Examiner has rejected claim 28 under 35 U.S.C. 103(a) as being unpatentable over Orlov in view of Hesh (U.S. Patent 4,868,408). The Applicant believes that this rejection has been addressed and overcome by the present amendment.

In the present amendment, the limitation “**single** annular fluid intake scoop and flow through encasement assembly” was incorporated into claim 9. Although Hesh shows a single

annular shell, the teachings of Hesh cannot be applied to Orlov, as the wind turbine of Orlov et al. will not function with a single annular shell (referring to column 2, lines 21 to 34, and the section “Description of Related Prior Art” of Orlov, as discussed above).

Therefore, claim 28 is believed to be allowable based on its dependency from claim 9, as discussed above with respect to claim 9, as well as for the additional features recited therein. As such, the Examiner is requested to withdraw this rejection.

Finally, the Examiner indicated that it is obvious to combine the teachings of Orlov and Hesh, as they are from the same field of endeavor, being the fluid turbine art. The Applicant takes no position on this issue at this time in view of the above arguments, and specifically reserves the right to argue against such combination in the future.

With Regard to the Rejection of Claims 25 and 26 under 35 U.S.C. 103 (a)

The Examiner has rejected claims 25 and 26 under 35 U.S.C. 103(a) as being unpatentable over Orlov in view of Francis (U.S. Patent 4,424,452). The Applicant believes that this rejection has been addressed and overcome by the present amendment.

In the present amendment, the limitation “**single** annular fluid intake scoop and flow through encasement assembly” was incorporated into claim 9. Although Francis shows a single annular shell, the teachings of Francis cannot be applied to Orlov, as the wind turbine of Orlov will not function with a single annular shell (referring to column 2, lines 21 to 34, and the section “Description of Related Prior Art” of Orlov as discussed above).

Therefore, claims 25 and 26 is believed to be allowable based on their dependency from claim 9, as discussed above with respect to claim 9, as well as for the additional features recited therein. As such, the Examiner is requested to withdraw this rejection.

Finally, the Examiner indicated that it is obvious to combine the teachings of Orlov and Francis, as they are from the same field of endeavor, being the fluid turbine art. The Applicant takes no position on this issue at this time in view of the above arguments, and specifically reserves the right to argue against such combination in the future.

In view of the above amendments and remarks, the Applicant respectfully submits that the currently pending claims 9, 11-14, 18-21, and 23-30 are allowable and that the Application is now in condition for allowance.

At the time of filing of the present response, all fees believed to be necessary were authorized to be charged to a credit card. In case of any over- or underpayment, the Office is authorized to credit or debit (as the case may be) Deposit Account number 502977.

Respectfully submitted,

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